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ABSTRACT

This publication describes schools of choice that are nontraditional in structure, including continuous-progress, open, and Montessori-type schools. It describes the philosophy, curriculum, teaching methods, school organizations, and grading methods of several different kinds of nontraditional schools: two continuous-progress schools, a Montessori school, a developmental school, and a microsociety school. The examples are drawn from elementary, junior high, or K-8 schools. The continuous-progress schools include Rafael Hernandez Two-Way Bilingual Magnet School (Boston, Massachusetts, Public Schools) and Mill Swan Communications Skills Center (Worcester, Massachusetts, Public Schools). Examples of Montessori, developmental, or microsociety schools include Bennett Park Montessori Center (Buffalo, New York, Public Schools), Graham and Parks Alternative Public School (Cambridge, Massachusetts, Public Schools), and City Magnet School (Lowell, Massachusetts, Public Schools). An example of a nontraditional school with curricular specialization is the Arts Magnet School (Lowell, Massachusetts, Public Schools). The final chapter examines new methods of shared governance practiced by some of the schools. Practitioners' checklists for identifying nontraditional school characteristics are included. (LMI)

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Book IV–Model Schools of Choice:

Nontraditional Organization and Curriculum

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PLANNING FOR SCHOOLS OF CHOICE: ACHIEVING EXCELLENCE AND EQUITY

BOOK IV

MODEL CHOICE SCHOOLS: Nontraditional Organization and Curriculum

Evans Clinchy
The Institute for Responsive Education
Boston, MA

Edited by
Frances Arick Kolb
New England Center For Equity Assistance
The NETWORK, Inc.
Andover, MA

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Publications Department
The NETWORK, Inc.
300 Brickstone Square, Suite 900
Andover, MA 01810
800-877-5400

Dedication

Frances Arick Kolb
1937-1991

This book is dedicated to the memory of Frances A. Kolb, who devoted her life and work to the belief that all children have the right to a quality education.

ACKNOWLEDGMENTS

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PREFACE

The New England Center for Equity Assistance, a project of The NETWORK, Inc., is pleased to publish *Planning for Schools of Choice: Achieving Equity and Excellence*, a series on controlled choice. The four books in the series are designed to aid school personnel who are considering controlled choice as a possible desegregation method. They will help educators to think about choice as a way of restructuring school systems and achieving desegregation, to learn how to develop a choice plan for their district, and to review the different kinds of school organizations that might be developed for schools in their district.

We are excited about controlled choice. It is a method of desegregation that is voluntary, empowers parents and school staff, and leads to new and exciting school organization and curriculum. It uses the best of the magnet schools concept by making all schools "magnets" for student enrollment. It celebrates and encompasses the diversity found in American schools. Choice acknowledges that since all children are not alike nor do they learn in the same way, schools need to reflect diversity. Further, parents and students should be able to choose the school they think most suitable for each child.

Parents have long shown a desire to choose the type of school their children attend. The quality of schools is one of the criteria they have used in selecting a neighborhood. They have enrolled their children in private and parochial schools; they have supported various types of education in their own school districts. They have stood in long lines or camped overnight to enroll their children in magnet schools. Children have made choices, too. Many, after all, choose not to attend school at all; they drop out. Some choose to go to exam schools or private schools. On the other hand, some parents have never had the luxury of making choices about the schools their children can attend. Because of poverty, illiteracy, or discrimination, they have been forced to send their children to schools that often are underfunded and inadequate. Choice, then, can be a means to empower all parents.

Choice alone, however, will not lead to desegregation of a school district. While choice may increase the comfort level of parents, students, and staff and may lead to improved schools, only *controlled* choice will also lead to desegregation. Based on the limited experience available at this time, its' potential as a desegregation method is great. Through use of a system of controlled choice, Lowell, Fall River, and Cambridge, three cities in Massachusetts, have been able to increase the integration of their schools. In Cambridge, controlled choice has resulted in increased achievement levels of students from different schools. In Fall River and Lowell, a major change in the school environment is already evident, as is a significant increase in parental involvement, especially in educational issues.

Controlled choice, therefore, has enormous potential as a means of restructuring schools not only to provide the highest quality education for all students, but also to become fully integrated by race, ethnicity, and gender. That potential can be realized, however, only through an extensive and complex planning process that

involves all elements of the community. Also, the school administration must make a major commitment to diversity of school organization and curriculum and to school-based management of that organization and curriculum.

These books, we hope, will be helpful to those who are interested in controlled choice and desegregation. We welcome comments and discussion of this new school structure.

The author, Evans Clinchy, is senior field associate at the Institute for Responsive Education, Boston, MA. He has worked in the field of desegregation and public school choice for the past twenty years. He has assisted the communities of Indianapolis (IN), Chicago (IL), Stamford (CT), and the Massachusetts communities of Lowell, Worcester, and Fall River to develop desegregation remedies based upon parent and professional choice. He is a contributing editor of *Equity and Choice*, and has contributed major articles on choice to *Phi Delta Kappan* and other educational publications.

INTRODUCTION

Books III and IV of the Planning for Schools of Choice series describe the two distinct approaches to schooling that are most often found in controlled choice schools. This book describes schools that are nontraditional in structure including continuous progress, open, and Montessori-type schools. These schools have very different educational philosophies, curricula, and school organization from the traditional schools described in Book III.

These books describe how each type of school differs from the others, how each of them envisions education, how each believes children can best learn, and what the curriculum and organization of each should be, since nontraditional schools often have a curriculum that specializes in a particular area. Several nontraditional schools are also described.

Although all the schools described in Books III and IV are schools of choice and can be identified as effective schools, these distinct approaches or options are, to a large extent, mutually exclusive. That is, they are so different in their basic assumptions about the process of schooling that it would be difficult to combine them.

This book describes the philosophy, curriculum, teaching methods, school organization, and grading methods of several different kinds of nontraditional schools: two continuous progress schools, a Montessori school, a developmental school, and a micro-society school. The examples used here are all elementary, junior high, or kindergarten-through-grade-eight schools. At the end of the book shared decision-making, another unusual element of some of these schools, is discussed.

The schools described here were not selected because they are necessarily the best schools of their type -- although each of them is certainly an exemplary school -- but because they are models of their particular approach to schooling. These schools provide good examples of one typical type of desired school -- the nontraditional school.

CHAPTER I

THE ATTRIBUTES OF EFFECTIVE SCHOOLS

"The single most important contribution education can make to a child's development is to help him [or her] toward a field where his [or her] talents best suit him [or her], where he [or she] will be satisfied and competent. We've completely lost sight of that. Instead, we subject everyone to an education where, if you succeed, you will be best suited to be a college professor. And we evaluate everyone according to whether they meet that narrow standard of success.

"We should spend less time ranking children and more time helping them to identify their natural competencies and gifts and cultivate those. There are hundreds and hundreds of ways to succeed, and many, many different abilities that will help you get there." -- Howard Gardner, Professor of Developmental Psychology, Harvard University, in the *New York Times*, November 9, 1986.

In the past decade, many educators have struggled to provide a diverse selection of desegregated schools. No single kind of public school, curriculum or standardized definition of educational excellence is equally suitable for and satisfying to the many parents and students served by public schools, or to the many professional educators who work in those schools. For parents, the new choices mean the power to choose the school or schools they feel will provide the particular kind of schooling and therefore, the particular kind of educational experience they want for their children. For teachers and principals, choice means the power to choose the kind of education they wish to practice, the kind they feel will provide them with the greatest degree of professional satisfaction and reward.

The idea that a public school system should provide a range of different kinds of schools is not new. Since all children are individuals, some children are good at some subjects and some kinds of educational activities and less talented at others. Some children enjoy and do well in a traditional, highly organized school environment, in self-contained classrooms with one teacher and 25 other children of the same age where all children learn the same thing at the same time. Other children find this environment too confining and learn better in schools that give them more control over what and how they learn.

Parents, too, have differing ideas about how they want their children educated. Many parents want their children to have a traditional education, while other parents believe schools can and should provide other kinds of experiences for their children. And just as children differ and just as parents have different ideas about the "best" approach to schooling, so also do teachers and principals. Many teachers and principals believe in and feel comfortable working in traditional, highly structured schools, while other teachers and principals find more professional satisfaction in schools with nontraditional aims and methods.

The idea that parents and professionals should have the opportunity to choose such different kinds of schools has come about primarily as a result of the alternative school movement that began in the 1960s and, more recently and directly, as a result of the creation of over a thousand magnet schools established in many urban school systems.

Although all schools aim to teach children the basic skills they may have differing educational philosophies, different ways of organizing themselves, different ways of going about the task of teaching, differing ideas about the best way for children to learn, and differing ideas about what school should be about. Indeed, it can be said that no school, existing or newly created, can operate without someone making or without someone having made a set of decisions about each of these areas. Thus every public school expresses a particular view of how children can and should go about the task of learning, a fairly clear idea of what teachers should teach and children should learn, and a set of rules and

regulations by which the school operates, including how the classes will be organized, how children will be grouped into those classes, what the disciplinary code will be, how the school will be governed, and so on.

Each school is striving to achieve educational excellence. Each aims to be an effective, high-quality school. Each wants its students to be successful both in school and in later life. But not everyone agrees on precisely how best to achieve these aims.

A New Approach to Excellence

In order to gain educational excellence with diverse schools, public school systems cannot impose on parents and students a single, uniform type of schooling. True educational excellence is more likely to be achieved when public school systems offer a diversity of schools. Each of these different kinds of schools can be designed to provide the most appropriate kind of schooling for particular children and for particular parents and professionals. Each school can strive for and provide its own distinctive version of educational excellence.

With a diversity of public schools, both parents and professional staff will be able to choose the public school they want, although such choices may be carefully controlled to guarantee integration, educational equity, and full access for all students. Indeed, many school systems are adopting this idea of educational diversity and controlled choice as both a desegregation remedy and a means to achieve educational excellence.

These controlled choice public schools work because all the people in them have a shared sense of mission, and have reached an agreement about the aims and methods of the school. This is the characteristic that most distinguishes the many alternative and magnet schools of choice that have developed during the past twenty or so years. And it is perhaps this same sense of a shared mission that has made these schools so popular and so educationally successful. Everyone in the school can concentrate on the job at hand -- educating the students and reaching their vision of excellence.

The Common Attributes of Effective Schools

Schools can and should differ in their philosophy, structure, and teaching methods, but all high-quality schools share certain common elements. In the context of educational equity, some of these attributes are:

1. Schools are desegregated and have student bodies that roughly represent the total school population of their district. In most cases, schools will be open to and serve students of all racial and ethnic groups and all income and achievement levels. Since parent choice is the most effective way of achieving desegregation, student assignment policies and admissions to schools of choice should be designed to guarantee genuine student integration.

2. Schools teach basic skills -- reading, writing, mathematics -- as well as science, history, geography, and the arts. However, this material will not necessarily be taught in a traditional form. Most likely, ongoing assessment and regular testing will insure that all students are achieving standards of competency.

3. Schools will conform to some general curricular requirements or mandates set by the state and/or by the local school board, such as all students will gain a basic knowledge of the U.S. Constitution and how a democratic society works. But such requirements should be kept to a minimum so as not to interfere with the ability of individual schools of choice to establish their own educational philosophies, curricula, and approaches to teaching and learning.

In addition to these attributes, the research on effective schools indicates that all good schools and, therefore, all schools of choice will most likely share some additional elements. An effective school is defined as one in which disadvantaged children can achieve at the same rate as advantaged children. The research has suggested, for instance, that all effective schools share the following commonalities:

- the staff will have a strong commitment to the idea that all children can and will learn;
- educational leaders play a major role in guiding practice through modelling and mentoring;
- the school has a safe and orderly environment that enables all teachers and students to concentrate on their learning activities; and
- parents are actively involved in school events, policies, etc.

With these characteristics as a guide, we can begin to define the full range of schools that parents and practitioners want in their public school systems.

CHAPTER II

WHY PRACTITIONERS AND PARENTS MIGHT CHOOSE A CONTINUOUS PROGRESS SCHOOL

The teaching methods used in most continuous progress schools are not that different from those followed in traditional schools. In both Worcester and Boston all schools are expected to follow a set of curriculum guides, and both Mill Swan and Hernandez schools follow the prescribed curriculum. The difference is in the class organization. Every child -- at least in reading and math -- is taught at his or her appropriate achievement level and moves through the established curriculum at his or her most appropriate speed. For classes in reading and math, this may mean homogeneous groups based on achievement levels, not age or grade.

This arrangement is part of the school's effort to help every child learn at a pace that enables the child to meet with the greatest degree of success. In these homogeneous classes, students spend some time working and learning pretty much on their own, with general supervision rather than formal teaching by the teachers. For other classes, children of several different achievement levels are mixed. Here students work together or alone on projects and often are given a great deal of choice about what they will study.

What Children Learn: The Curriculum

In most continuous progress schools the curriculum will include the traditional basic skills subjects -- reading, writing, language arts, mathematics, science, social studies, art, music -- as well as such practical subjects as woodworking and the domestic sciences, and career exploration and career education.

How Teachers Teach and Children Learn

For the most part, especially for the basic skill subjects of language arts and mathematics, the classes are taught in a traditional fashion. The lessons are prepared by the teaching staff and presented to the students just as they would be in a traditional school. The fact that all of the children in any given basic skills class are working at the same level of achievement, however, makes it possible for a teacher to teach the same lesson to the entire class.

In the other subjects -- science, social studies, art, music, the practical arts, career exploration, and soon -- where children are grouped heterogeneously, the classes tend to be much less formal. Students are often engaged, either on their own or in small groups, on projects either suggested by the teachers or developed by the students themselves. Often these projects encompass several subjects. Thus at Mill Swan, for instance, social studies and science are integrated into interest units that the children can select. Children are often given a great deal of choice about what they will study.

How These Schools Are Organized and Run

Most continuous progress schools operate in conventional school buildings with conventional, self-contained classrooms. In the course of the day, however, students move from classroom to classroom. They may be grouped by achievement levels in one particular classroom or come together in heterogeneous groups in others. Where continuous progress schools operate in buildings specifically designed for this type of school organization, the schools have large open spaces within which a number of teachers and students hold classes, separated only by bookcases or by space dividers.

Whatever the space arrangements, this approach to teaching and learning means that teachers work closely together, often in a team teaching arrangement. Since several teachers will be teaching the same child different subjects, the teachers confer frequently to make sure that each child is progressing in all subjects and to keep track of that progress.

In most continuous progress schools, the day is not laid out in periods; instead, the schedule is divided into large blocks of time, often two or even three hours in length. Teachers are free to organize their classes according to what they feel the students need at any particular time.

How Children Are Graded

In many continuous progress schools, students are tested frequently to make sure they are making progress in their studies. These students, however, are not in direct competition with each other. Rather, each student's progress is measured in terms of how much the child has learned in each subject, given where the student started at the beginning of the school year. Students are expected to progress continuously through the curriculum and at their own natural rate of speed. Students are thus in competition only with themselves and are encouraged to learn as quickly and as well as they possibly can, without feeling that they must learn as quickly -- or as slowly -- as other students.

Since students in most continuous progress schools are not graded on a bell-shaped curve with only some students getting high marks, many continuous progress schools do not use letter grades. Rather they use numbers, with a grade of "1" meaning that the child is progressing well according to that child's ability and appropriate rate of progress. A "2" would indicate that the child is not progressing quite as rapidly as the school believes he or she could, and so on. It is thus possible in a continuous progress school -- indeed it is one of the aims of most such schools -- that all the children could get "1s," which would mean that every child is progressing through the curriculum just as rapidly as he or she should be.

CHAPTER III

CONTINUOUS PROGRESS SCHOOLS: TWO EXAMPLES

The two schools described here are very different from each other, although they are both organized on the continuous progress model. Each school is not necessarily the best or only example of such a school, but it is a good example of what an effective, continuous progress school is like.

RAFAEL HERNANDEZ TWO-WAY BILINGUAL MAGNET SCHOOL BOSTON, MA, PUBLIC SCHOOLS

The eighteen children in Lourdes Barrios's extended-day kindergarten class at the Rafael Hernandez Magnet School are playing a game of red light/green light. Although the children have been here since early morning, they show no signs of diminished energy.

As the children run pell-mell around the tables and chairs, Ms. Barrios cries out "red light!" and the children freeze -- or most of them do. The ones who failed to do so have to sit down, much to their disgust and annoyance. Ms. Barrios then says "green light!" and the running starts again. This goes on for a few minutes and serves in part as the children's physical education period, since the school has no gym. At the end of the game, each of the two winning students is awarded a lollipop.

Photo by Steven Senne

Playing a word game at Rafael Hernandez School

Ms. Barrios's class is composed almost equally of Hispanic-American six year olds, some of whom speak no English at all, and African-American and white six year olds who speak no Spanish. For most of the children, this class is their first introduction to a foreign language. Since the Hernandez is a two-way bilingual school, this is precisely the point. By the time these children leave the school after the fifth grade, the Hispanic-American children will be fluent English speakers and the Anglo children will speak fluent Spanish.

Following the "red light/green light" game, Ms. Barrios gathers the children into a circle, with everyone, including Ms. Barrios, sitting on the room's carpeted floor. After a few minutes of getting everyone settled down (not an easy job), she sets up a velcro-covered bulletin board on the floor beside her and opens a box containing cut-outs of parts of the human body. She sticks the pieces on the board to form a complete human figure.

"Now," she says, speaking in English and calling first on the Anglo children, "what is this (pointing to the figure's head)?" "Cabeza!" answers the child called upon. "And this (pointing to the figure's arms)?" "Brazos!" shouts another Anglo child. "And this (pointing to the figure's hands)?" "Manos!" "Quanto manos?" she asks in Spanish. "Dos!" the same Anglo child answers. She now continues in Spanish and begins asking the same questions of the Hispanic children. The answers come thick and fast. "Nose!" "Legs!" "Ears!" "How many ears?" "Two!"

Ms. Barrios continues this lesson which the children are obviously treating as one big fun game, by asking her questions in Spanish to the Anglo children and in English to the Hispanic children. The children have little difficulty switching back and forth.

After the body game, the children are paired off, and they listen to a song based on parts of the body sung in English. When the singer sings about wiggling toes, the children wiggle their toes. When the song is about "my friend helping me sit up," the lying-down child is helped to sit up by the kneeling child. Ms. Barrios turns the record over and the same song is sung in Spanish, with the children again performing the required tasks.

For a monolingual observer with no Spanish proficiency such as myself, the ease with which these children are beginning to move comfortably back and forth between the two languages is astonishing.

* * *

The Rafael Hernandez School is located in a building that once housed an automobile dealership. Because it shares the building with the central kitchen facility for the entire Boston school system, the Hernandez is one of the most peculiarly shaped school facilities in the world. At its core is a large open space that used to be the dealership's showroom. Now it is partitioned into the school's library, several small classroom areas, and a cramped computer room. Around the fringes of the central area are regular classrooms, almost all of them sporting some oddball shape such as a trapezoid.

The school houses 200 children from kindergarten through grade five, of whom 60 percent are Hispanic-American, 20 percent African-American, and 20 percent white. About 60-80 percent of the school's Hispanic-American population have a limited proficiency in English, at least when they enter the school.

"And," says Margarita Muniz, the school's principal, "we're almost the toughest school in the city to get into. We have a very limited enrollment because of the size of our building, and we have a very high retainment rate. So we have perhaps 10 to 15 openings a year in the regular grades and 25 in the kindergarten. Last year we had 119 applicants for those 25 kindergarten seats."

"As you saw," she continues, "our kindergarten class is made up equally of Hispanic and Anglo children, and they do all of the learning together. Then, starting in first grade, we move into a continuous progress organization that involves both integration and mainstreaming."

"Let me explain what we mean here by those two terms. 'Integration' means that we group all of our children together in their home rooms by grade. That is, all of our first graders will be together for subjects such as math, social studies, science, music, and art. And these subjects are taught in both languages. Since all of our regular teachers, and, in fact, most everyone on our staff, are bilingual, we can teach any subject in either language. However, for reading and language arts, we group our first and second graders who are not English proficient together in a class that is taught primarily in Spanish. And our Anglo children will also be grouped together, since we believe that you should begin to learn to read in your dominant language.

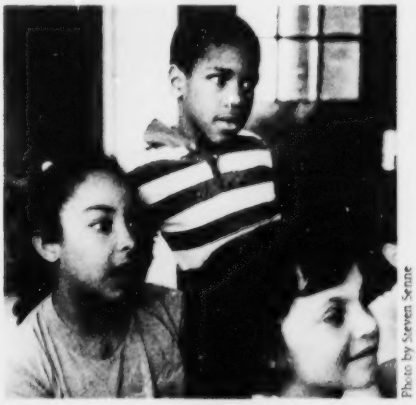

Photo by Steven Senne

Students listening to a class discussion at Rafael Hernandez School

"Then in third, fourth, and fifth grades, we group the children according to their various language abilities. While remaining integrated for most subjects, our Hispanic-American third graders will have reading in Spanish for two periods and then one period in English. And the Anglo children will have two periods of reading in English and one period in Spanish as a second language. In fourth and fifth grades, our Hispanic-American children will have one period of reading and language arts in Spanish and two in English, while the Anglo children are taught in English and continue their Spanish as a second language. In all cases we try to put children in reading and language classes in each language according to the level at which they are achieving in that language, so our classes often contain children of quite different ages.

"By 'mainstreaming' we mean that our Hispanic children, as they go up through the grades and become increasingly fluent in English, are gradually exposed to more and more classes taught in English. By the fourth and fifth grades, both they and the Anglo children are able to learn equally well in Spanish and English. And although both languages are used, the classes tend to be taught predominantly in English. Our Anglo children who are especially advanced in Spanish, however, will also be in advanced Spanish classes. It's all very complicated but it works quite well, although it takes a great deal of effort on the part of all of us on the staff to make sure every child is receiving exactly the kind of instruction that is appropriate to that child."

While the teaching of both English and Spanish is high on the Hernandez agenda, that is only one of the things that Ms. Muniz and the school hope to accomplish. "Of course, while we are teaching languages, we are also teaching culture -- and not just Hispanic-American, African-American, and American cultures, although we do a lot with those. We see language as one of the main components of culture and perhaps the most important component, because it embodies the culture in a thousand ways, including how you feel about yourself and how you express yourself. All this says a lot about culture. But then there

are the physical, the external manifestations of a culture -- the music, the dances, the history, the sciences.

"So we have here a truly multicultural program. In third grade, the children study Japan, in fourth grade, Africa, and in fifth grade, America at the turn of the century. We work with the Children's Museum, Plimoth Plantation, the Community Music Center, Wheelock College, and the Museum of Fine Arts. We try to integrate all of these with our cultural studies. For instance, around Columbus Day, we integrate Columbus' discovery of Puerto Rico and the mainland with Plimoth Plantation and Thanksgiving, and we have a big fiesta with a feast of roast pork and fried plantains."

"Also, there is a lot of fantasy out there in the world that children are exposed to -- television, drugs, crime. It's very easy to fall into that unless you have very strong parents who are going to steer you on the right course and know where they want you to go. You can easily get lost. That's one reason we try very hard to get all of our parents involved in everything we do here. They are invited to take part in everything, including taking English and Spanish classes. Many of our teacher aides are parents of children in the school.

"I want these kids to learn to be inwardly tough, not in a bad sense, but to be self-reliant, so that they can do things and survive. Then they'll be able to get ahead in life. There are only two rules in this school. One is that we all have a right to be safe. The other is we all have a right not to get hit. If you follow those rules, you never get into trouble."

"Children love to come to this school -- our attendance is 98.4 percent, the second highest in the city. It's nice here, it's fun, it's exciting, and that's the way education should be. There's enough variety in this school to make up for all the things that most of these children don't have that suburban kids get -- music, the arts, and so forth. That's why it may cost a little more to educate our children, but it's well worth it."

* * *

Since this report was written, the Hernandez has -- at long last -- been given a new and much larger facility. Or, if not precisely a new facility, at least an old junior high school building that has been completely renovated. The new building has allowed the school to double its population to roughly 400 students, thus making the program available to many of the parents and children on the school's waiting list.

MILL SWAN
COMMUNICATIONS SKILLS
CENTER
WORCESTER, MA,
PUBLIC SCHOOLS

Gilberto, a slightly chubby, curly-haired nine year old, is the student I am to follow through a morning at Mill Swan Communications Skills Center, one of Worcester's fifteen magnet schools. Gilberto has been described to me -- with an affectionate grin -- by Mike Silver, the school's full-time curriculum facilitator, as "a real bad guy." He went on to say, "When he first came here, he never paid attention, never did his homework. Now he's really coming along. He may not be one of our best students yet, but he's getting there."

Since Gilberto is nine years old, he is technically classified as a fourth grader. But at Mill Swan, that does not mean that Gilberto spends his entire day with other nine year olds in a fourth-grade class. As a continuous progress school during most of the morning children are grouped for instruction in the areas of reading/language arts and math by their level of achievement. At the beginning of each year, Gilberto and all of the children in the school from grades one through six are tested in reading and math.

All of the children, like Gilberto, who test at a fourth-grade level in reading are grouped together in one class, whether they happen to be nine year olds or not. Such a reading/language arts class could thus be made up of advanced second or third graders, the fourth graders who are achieving at a fourth-grade level and perhaps fifth graders who are a little behind and are achieving only at a third-grade level. And, in a similar fashion, all the children who tested as fourth graders in math are put together in one class.

Thus Gilberto, who tested out at an average fourth-grade level in both reading and math, finds himself in classes with fourth, fifth, and sixth graders, all of whom are working at his level of achievement. This means, in Gilberto's case, that he will have one set of classmates and one teacher for his language arts class and a different set of classmates and a different teacher for his math class.

Students working on a writing project at Mill Swan Communications Center

According to Principal Francis J. Trainor, there are good reasons for this way of organizing children and teachers. "Our continuous progress organization," he says, "eliminates the situation we often had in the past where a fourth-grade teacher might have children achieving at as many as three or four different levels of reading and math all in the same class, ranging from high-achieving kids to relatively low-achieving ones. Since the teacher could only work with one group and one achievement level at a time, the other two or three groups

were left to do seat work, which most often was a complete waste of their time and a continual discipline burden on the teacher.

"Under our present organization, a teacher has only children learning at the same level and can thus move the entire group along as rapidly as possible. And the children move at their own speed, too. If a child does very well at his or her third-grade achievement level and is ready to move on, we can move that child into a higher group at any time during the year. We don't have to wait until the next year, although most changes do occur during the first six months.

"So we have some eight-year-old 'third-grade' children here who are working at a fifth- and even sixth-grade level and not wasting their time back in a 'third-grade' class. And we also have some 'fifth and sixth graders' who are with the fourth-grade achievement group, because those are the things they need to learn before they can move on."

The continuous progress organization applies only to the morning reading and math classes. For the afternoon classes in social studies and science, children are grouped heterogeneously by their age grades (all fourth graders take these subjects together, all fifth graders, and so on).

When I arrive in Joy Cherrier's reading/language arts class, Gilberto is already seated at a desk in the back of the room. The class consists of 20 children seated at desks that are more or less lined up in rows. On the chalkboard at the front of the room is a list of the day's spelling words -- "cloth, paused, coil, poison, claws, oyster, faucet." Ms. Cherrier has the class working on declining adjectives. Three of the class's students are at the chalkboard in front of the room. The class has been asked to work on the adjective "tall." On the chalkboard are three sentences: "Joey and Joey are tall," "Joey Gigliotti is taller," "Joey Gigliotti is the tallest."

Gilberto and the other students have also been working on pages in a workbook. Ms. Cherrier now calls on individual students, asking them to tell the entire class how they filled in the blanks on the assigned sheet. There is much waving of arms -- always including Gilberto's -- as the fledgling grammarians volunteer to answer the questions.

At the end of Ms. Cherrier's reading/language arts class, Gilberto and I line up at the door with nine other kids and march through the halls, heading for Ms. Mahoney's fourth-grade math class. Due to a lack of space in the building, this class is held in a tiny room, almost a large closet, with barely enough space for ten desks and chairs. There is no chalkboard and not much room for Ms. Mahoney to stand at the head of the class. This class, too, is made up of fourth, fifth, and sixth graders.

* * *

Since the magnet distinctiveness of Mill Swan (in addition to its continuous progress organization) is its emphasis on communication skills, the immersion of students in reading and writing begins early. For example, every student writes

every day. Indeed, one of the most unusual and interesting aspects of the Mill Swan program is its use, the first in Worcester, of IBM's Writing to Read program, a computer-based instructional system designed to develop the writing and reading skills of kindergarten and first graders. This program teaches reading through writing instruction.

As the principal puts it, "We've instituted this program -- and the rest of the communication skills program -- as a reaction to what I see as one of the major problems in education today, the inability of children to write well and to want to write. If they are going to want to write, then they need to see a reason for writing, why they should do it. And that's the theory we operate under here -- that writing is and can be satisfying and fun and has a point right from the beginning, right from the very first day. One way we do this is by getting children to write about their own experiences and ideas."

"The typical situation -- especially in fifth and sixth grade by which time the children know that reading and writing in school are boring and pointless -- is that in September the teacher says 'Let's write about our summer vacation' and there's a proportionate number of groans -- Oh, do we have to do that! So here we encourage all kinds of writing -- poems, stories, essays, debates, editorials, news stories, anything that will get the kids writing and then, of course, reading what they write. Then as they get interested and need more skills, we gradually get them moving into more formal and highly skilled writing. That's one reason we have our literary magazine. We don't just publish the 'best' writing. We publish examples of everybody's writing, mistakes and all, as long as they are working at it and improving."

The Writing to Read program is housed in a special room that used to be the stage of the school's auditorium. The kindergartners, first graders, and resource room and special needs children come to the Writing to Read Center for at least an hour each day. The Center is a large open space divided into five areas or learning stations. The first station is equipped with four IBM PCjr color computers that are also equipped with a speech attachment enabling the machine to "talk" to the user. The children I observed during one of the first grade sessions could hardly wait to get to the computers and put on the earphones. Here they are able -- with no difficulty that I could detect -- to use the computer to learn not just the alphabet but the 42 sounds or phonemes on which the English language is based.

After beginning to get the hang of the alphabet and words, they move to a work journal station and the writing/typing station where they begin to write their own material -- stories or whatever they want to write -- and then to type them on the IBM Selectric typewriters. There are two further stations -- one where they listen to recorded stories while following the printed page in a book and another where they can make words, sentences, and stories out of the phonemes by putting together a whole raft of printed phonemic blocks.

Janet Bedell, the Writing to Read specialist in charge of the Center, feels that the program is going well. "It will be several years before we know whether and how much it pays off in the upper grades," she says, "but I know now that these

kids have no trouble mastering the computers and the typewriters, and I can really see them discovering the joys of using language -- in large part, I think, because they get to express their own ideas and feelings. They seem to love the idea that they can manipulate the English language and produce things that they can feel and see and hold on to."

Mike Silver, as part of his duties as full-time program facilitator at the school, is responsible for another of the school's curricular attractions -- the interest units in social studies and science with which the school attempts to integrate all of the basic skills work. In this year's three units -- the ethnic history of Worcester, nutrition, and the ecosystem of Cape Cod -- Silver is attempting to construct both subject matter units and a way of teaching that fit into the citywide Worcester curriculum and at the same time encourage excitement and the joy of learning in students.

"There is," he says, "a standard curriculum in Worcester and everything we're doing fits into that standard curriculum, including social studies and science. There are spots in the curriculum where you can fit things in. When asked what's different about his approach he says: "It's not so much the curriculum, standard or otherwise, I think, as the method. I think children don't like to be lectured at. I think they like active education. For instance, when we're doing history here, the children have to dress up as an historical figure and deliver their book reports in the first person as if they were talking about themselves. They love it."

* * *

Teachers and principals interested in the continuous progress or nongraded form of education might look for the following when they visit the school: See Practitioner's Checklist: Continuous Progress Schools on next page.

PRACTITIONER'S CHECKLIST

CONTINUOUS PROGRESS SCHOOLS

	Yes	Somewhat	No
1. EDUCATIONAL PHILOSOPHY			
a. Emphasizes basic skills and the conventional academic subjects of reading, writing, literature, mathematics, science, social studies, and the arts.			
b. Ensures that all children reach their full intellectual and social potential.			
c. Believes that individual children differ widely in their abilities, interests, and talents.			
d. Encourages every child to move through the curriculum at his or her own rate.			
2. CURRICULUM Stresses basic skills and conventional subjects such as language arts, science, mathematics, music and art, and social studies.			
3. HOW THE SCHOOL SHOULD BE ORGANIZED AND RUN			
a. Groups students according to achievement levels for language arts and mathematics.			
b. Provides students with opportunities to explore their special interests and talents.			
c. Schedules large blocks of time for language arts and mathematics.			
4. HOW STUDENTS SHOULD BE GRADED			
a. Measures progress on a child's abilities and expected rate of learning.			
b. Informs parents about their child's academic and behavioral progress through report cards and parent/teacher conferences.			

CHAPTER IV

WHY PRACTITIONERS AND PARENTS MIGHT CHOOSE A MONTESSORI, A DEVELOPMENTAL, OR A MICRO-SOCIETY SCHOOL

Educational Philosophy

Montessori, developmental, and micro-society schools are based on the educational philosophy espoused by Jean Piaget, the Swiss developmental psychologist. According to Piaget:

> The principle goal of education is to create men [and women] who are capable of doing new things, not simply of repeating what other generations have done -- [people] who are creative, inventive, discoverers . . .
>
> The second goal of education is to form minds which can be critical, can verify and not accept everything they are offered. The great danger today is of slogans, collective opinions, ready-made trends of thought. We have to be able to resist individually, to criticize, to distinguish between what is proven and what is not. So we need pupils who are active, who learn early to find out by themselves, partly by their own spontaneous activity and partly through materials we set up for them: who learn early to tell what is verifiable and what is simply the first idea to come to them.

In this developmental view, children are born with the capacity to develop a wide variety of intelligences. According to developmental psychologist Howard Gardner, these distinct or "multiple" forms of intelligence are:

- verbal (the ability to think and communicate through speaking, reading, and writing a human language), including all forms of verbal communication, and the creation of stories, novels, plays, poetry, etc.;
- logic-mathematical (the ability to think, communicate, perform tasks, and solve problems using numbers and other mathematical symbols);
- bodily-kinesthetic (the ability to think, communicate, and perform tasks through the use of the body and bodily motion), including most of the practical and mechanical skills such as carpentry and auto repair, but also sports and the dance;
- spatial/visual (the ability to think, perform tasks, and solve problems involving visual skills), including architecture and the visual arts such as painting, sculpture, etc.;
- musical (the ability to think, perform tasks, and create using sound, musical scales, and notation, etc.); and
- personal/social (the ability to understand and be skillful at working with people), including political and managerial skills.

Although the ability to develop these intelligences is a given, these intellectual capacities must be carefully nurtured by a child's environment. Every child is endowed with a natural curiosity about how the world works and about how and why people behave the way they do. Advocates of the developmental approach believe schools should encourage children to pursue this natural curiosity and help them learn through continuous development. Appropriate schooling of this kind can play a major role in assisting each child's development; inappropriate schooling can depress or even arrest it.

All children -- indeed, all human beings -- acquire the skills and knowledge they need most effectively through their own activity, through exploring their environment, through testing their developing intellectual structures against the realities they encounter in that environment, and thus through constructing in their heads a convincing and workable framework for understanding how the world operates. "To understand," as Piaget says, "is to invent." A corollary proposition might be "To do is to understand."

According to this theory, a school should be a place where children, guided by knowledgeable and understanding adults, are assisted in this process of exploration, testing, and construction (invention). This requires a school environment in which children are encouraged to exercise their own initiative and their own responsibility for learning. It should be an environment so arranged and organized by adults that children -- sometimes working alone and sometimes in groups -- can generate most of their own learning activities.

What Children Learn: The Curriculum

In most developmental schools, the general outlines of the kinds of studies and activities children will pursue are determined by the principal, the teachers, and often the parents of the school. All such schools aim to teach students to read, write, to develop their understanding of science and mathematics concepts, and to become well-acquainted with the great works of literature, history, art, and music. There is (with the possible exception of Montessori schools) no standardized curriculum. Teachers are encouraged to create their own curricular units and materials as circumstances and the make-up of their classes dictate.

In almost all of these schools to a greater or lesser degree, however, individual students are given a great deal of responsibility to decide just when and how they are going to undertake particular activities. Children often come up with intellectually stimulating and fruitful ideas for areas to study and often bring materials to school that spark a day or a week of specialized study.

How Teachers Teach and Children Learn

In most developmental schools, the style of learning and teaching is both collaborative and individual. While teachers and students work together to decide on the specific activities for the day or week, students direct many or most of their own activities

How These Schools Are Organized and Run

In most developmental schools (including all Montessori schools), children are grouped "vertically" for most of the school day. That is, all primary classes will house children from kindergarten through grade two or three, and intermediate classes will be made up of children from grade four through five or six.

The daily and weekly schedules allow for constant adjustment and readjustment based on the needs of individual students and groups of students. Most of these schools believe that once a student has embarked upon a task or become interested in pursuing a particular topic, it is of utmost importance to give the child time to finish studying the topic.

How Children Are Graded

Developmental schools, although they may conduct more or less regular testing (especially in basic skills), do not issue or record formal grades. Rather, they rely on written comments by teachers to describe a child's progress. These written comments are sent home to parents at regular intervals and students progress at their own rate of development.

Such schools assume that parents are deeply involved in the education of their children and augment the written comments with frequent parent/teacher conferences. Parents are also encouraged to visit the school regularly and to participate in learning activities.

CHAPTER V

MONTESSORI, DEVELOPMENTAL, MICRO-SOCIETY SCHOOLS: THREE EXAMPLES

Three developmental type schools are described below. Each school is structured in a nontraditional manner based on what the staff and parents believe is an appropriate way for children to learn.

BENNETT PARK MONTESSORI CENTER BUFFALO, NY, PUBLIC SCHOOLS

In Evelyn Clements' classroom at Bennett Park, 18 three, four, and five-year-old children are distributed around the bright and sunny room. Half of the room is covered by soft carpeting; the other half by a wood floor. As I enter the room, about half of the children are busily at work on a variety of tasks in the uncarpeted space. Some of them are working at a water table pouring water from small containers into larger ones or vice versa. One three year old has a bar of soap and is happily making a sudsy mixture in a bowl. After working up the mixture to her apparent satisfaction, she begins making soap bubbles and watching them form and disappear.

Photo by Carmen Rodriguez

Fourteen-year olds classify rocks and minerals in science class at Bennett Park Montessori Center

In the carpeted half of the room, children are sprawled comfortably on the floor working with different materials. In some cases the children are working by themselves; in other cases, two or even three children are working together. Each child has his or her own small rug, and whatever materials the child is working on are always laid out on that rug.

As I watch, two boys go to one of the shelves that line the walls of the room and take down a set of long, thin wooden rods, all of different lengths and all painted red. They carry the rods to their rugs, an operation that takes several trips. When they have the entire set on their combined rugs, they begin to arrange the rods against each other according to their lengths -- starting with the longest rod and working down to the shortest.

The two boys are ferociously intent upon what they are doing. Occasionally a sharp disagreement arises about where each rod goes. This usually leads to a discussion between the two, with each child showing the other where it should go. After a moment's argument, both boys agree on the rod's placement. In short order, they lay out the complete set of rods. Then they take the set apart

and begin piling the rods one on top of the other, with the longest rod on the bottom until the shortest rod is sitting on top.

After about ten minutes of this exercise, they decide they have had enough of the rods. Each takes half of the rods and carefully puts them back on the shelf in the exact place they came from, and in the proper order.

While this has been going on, a five-year-old has been sitting beside her rug a few feet away. She and the class's assistant teacher, Janet Hyman, have been working with a set of cards. Each card has on it the outline of an apple, but each card is slightly different. On one card the whole apple is colored red and at the bottom of the card is the word "apple." On another card only the central part of the apple is colored in red and beneath it is the word "core." There are similar cards with the different parts of the apple outlined in red and the appropriate words such as "pulp," "seeds," and "skin" written underneath.

Beside the girl is another set of cards that have the same pictures but no words and a third set that has words but no pictures. While the assistant teacher silently watches, the girl begins matching the cards with the pictures. She sits back and admires her handiwork for a minute or two before launching into the next activity -- putting the cards with the words but no pictures over each of the cards with pictures but no words. When she has finished, she copies each of the words on a piece of paper and shows them to the assistant teacher who smiles and congratulates her. Then the girl undoes the pile of cards and puts each set of cards back into its proper place in the box. She carefully puts the box in its proper place on the shelf.

While this has been going on, the other children in the room have been busy at projects which they have selected, using the various materials and equipment in the room. The room is a bustle of activity, with every child engaged in one project or another. These projects are almost always chosen by the child, who sometimes works on them alone and sometimes with other children.

In addition to these in-classroom activities, the children have several out-of-classroom things they can do. In the hallway, for instance, there is a set of climbing equipment. If a child wants some large-muscle exercise he or she goes to the doorway and takes a red wristband from a hook and puts it on. This means that he or she is one of the three children who can now go out into the hall and climb on the equipment. If there is no red wristband on the hook, the child must wait until one comes back. On another hook are three orange wristbands for the library and elsewhere a blue necklace for the bathroom. Waiting for and taking turns is something these children have learned well.

* * *

After observing this busy and at times mysterious activity in just one of the school's classrooms (there are 850 students from three-year-olds through eighth graders in the school), I hasten down to the school office to have some of the mysteries unraveled. Dr. Rae Rosen, the director of Bennett Park, is not surprised at my being just a bit bewildered.

"Yes," she says, "it isn't always easy to see right off what the point of some of the activities are. And yes, a great deal of it can seem like pointless play. But, of course, that is one of the basic tenets of the Montessori system. To the very young child, it should very much seem like play. It should be, in Montessori's words, 'spontaneous' activity -- children choosing and doing things because they want to do them. After all, children are naturally curious and love to manipulate real, concrete things and objects, to test them out, to see what the things in the room can do and what they can do with them."

Five-year olds use a "mystery bag" to identify geometric solids at Bennett Park Montessori Center

"But the essence of the Montessori method is that every piece of material in the room has a specific purpose. Montessori herself, back at the turn of the century in Italy, spent long hours observing young children, watching what they spontaneously did outside school, in their everyday life, and also what they did and didn't do in school when they were exposed to formal teaching. What she discovered was that young children could learn almost everything they were supposed to learn through their own activity, through using their own senses and manipulating concrete materials if the materials they had to work with were the proper ones. They didn't need to be 'taught' or 'instructed' in the usual ways most formal schools used, ways that often kept the children from learning."

"She set about inventing the right kinds of materials and equipment and trying them out with the children. She discovered that the right kind of carefully designed materials were 'autodidactic,' that is, they were 'self-teaching.' By using the materials on their own -- under the guidance of a carefully trained teacher -- children could essentially teach themselves."

"She eventually arrived at what she called 'the prepared environment,' a classroom (and therefore a school) that was filled with just exactly the materials and equipment that the children need to develop their senses and their minds and thus to learn all the things they need to learn -- including reading, writing, math. But, she believed, they would really learn all these things because they would have developed the basic concepts through their manipulation of the materials long before they ever had to print them out and handle formal rules and notational systems like numbers and spelling."

"Or take the girl working with the cards -- which are called nomenclature cards. Like all of the materials, those cards are accomplishing a wide variety of things all at the same time. In one sense, they are teaching the basic principle of reading and writing -- that words stand for something. The word 'apple' 'stands for' the object apple. But the cards are also teaching some of the basic rules of classification -- that all objects in the living world have been divided into categories, such as fruits, vegetables, animals, fish, and so on -- and that in the

case of a fruit like the apple that each fruit is subdivided into its main parts -- skin, core, pulp, and so on. All of this is in preparation for the study of biology that they will get to later on."

"I suppose, " says Dr. Rosen, "that you could say that one of the main differences between a Montessori school and most traditional schools is that here we see our primary job as preparing the environment to suit the needs, interests, and abilities of the children. And by that I mean really preparing the environment with exactly the right materials. Nothing is left to chance. Every piece of material, every bit of equipment, has a precise aim and precise exercises built into it. Every piece of material is part of a carefully designed sequence of other materials, from simple to more complex and demanding."

"It's the teacher's job to make sure that his or her classroom environment is properly prepared and that the children know exactly what to do with each of the materials. In fact, at the beginning of a year, there are very few materials in a classroom. The teacher takes each piece of material, and, before putting it on the shelf, she holds what we call a 'classical presentation.' That means that she sits the whole class down and demonstrates what the material can do and how it should be used. This is all done nonverbally. She simply does it herself and shows them how to use it. Then it goes on the shelf and can be chosen by the children."

"After the environment has been properly prepared, the second job of the teacher is to step back and to watch the interaction between each child and the materials, to make sure that the child is getting what he or she should be getting from working with the materials, and then to help each individual child if he or she is having any difficulties."

"The children, of course, are able to choose the materials they wish to work with. This makes sense, because children almost always pick the material that is just at their appropriate level. They don't pick a piece of equipment that they've already mastered -- that would be boring. So they generally pick the next level of material, because that offers them a new challenge, something new to learn. For them, that's the fun of it all."

And why the vertical grouping? Why put three, four, and five year olds together in a class? Or five, six, and seven year olds? "That's easy," says Dr. Rosen. "Because it's more natural, more like living in a family, which is the general atmosphere we want to create in this school. How many situations in real life do you know of where a child associates only with children exactly his or her age?"

"Of course, such grouping has enormous educational benefits, too. The older, more experienced children -- let's say the four or five-year-olds in a three-to-five class -- can obviously provide a lot of help for the three-year-olds. The older children do a lot of the teaching of the younger ones. In that sense, all of the children 'play' with each other and teach each other things, just as they do in the real world."

"Perhaps I could best sum up what we're all about here by quoting Montessori: 'the child's work is to create the man [woman].' Our main job is to make sure children do that, that they elevate what we call 'prepared' play into that work of creating themselves as capable, functioning adult people."

"And that, I think, is the point of any kind of activity-based schooling, whether it's Montessori or open education or whatever. It's only through children actually doing their own learning, by choosing and manipulating materials and objects, that they genuinely understand what they are learning and therefore, that they really learn it. And, of course, as they get older and acquire and understand all of the basic concepts, things like books and reading material of all kinds become the natural objects they need and can use."

* * *

GRAHAM AND PARKS ALTERNATIVE PUBLIC SCHOOL
CAMBRIDGE, MA, PUBLIC SCHOOLS

"This school's first classes were actually held outdoors -- up at Fresh Pond back in 1972 -- and, thankfully, the weather was with us, because we didn't even have a building at that time. We had been promised by the School Committee and the school administration that we would have seven rooms allotted to us in the brand new Martin Luther King School building. But a few days before school opened that September, we discovered that the School Department had put two special needs classes in the middle of our space, which meant there was no room for us."

The speaker is Ms. Ann Bolger, a parent whose children were among the first to attend what has become the Graham and Parks Alternative Public School, one of thirteen schools of choice in Cambridge, Massachusetts. Now she serves as the school's full-time parent coordinator; she has been both an eyewitness to and an active participant in the school's dramatic history.

"So we parents," she continued, "sat in on the School Committee several nights in a row. We refused to leave, and some parents dramatically brought sleeping bags and so forth. We won the School Committee's support to move into a building that the system had just vacated -- the old Putnam School. Later on we moved into rented space in a vacant parochial school. That is how what came to be the Cambridge Alternative Public School (or CAPS) program got started."

Ten years later, in 1982, the CAPS program -- 190 students integrated by race, gender, and socio-economic status -- was merged with the Webster School in the Webster's handsomely renovated school building in Cambridgeport. The new combined school was renamed after Saundra Graham, a longtime community activist, a Cambridge city councillor, and a state representative, and Rosa Parks, the woman who became a heroine of the Civil Rights Movement when she refused to sit in the back of the bus in 1955 in Montgomery, Alabama. Indeed, one of the features of the renovated school is a brilliant mural covering one of the first floor walls and featuring African-American and white children learning together with a depiction of Rosa Parks sitting all alone in the front of that bus.

The school now has an enrollment of more than 350 students from an extended-day kindergarten through eighth grade. The school is 51 percent minority, half

boys, half girls, and has a full range of income levels. About 70 percent of the children qualify for free lunch. Almost 98 percent of the parents work, and well over 50 percent of the children come from single-parent homes. Many of the minority children are Haitian, since the school houses a Haitian bilingual program.

Graham and Parks is an unusual school in at least two ways. It is, first, a developmental school of choice. As with the developmental approach employed at Bennett Park Montessori Center, the educational philosophy, the classroom practices, and the school atmosphere at Graham and Parks are all based on the belief that children are capable of developing their intellectual, social, and moral capacities through their own self-selected activity rather than through formal instruction in conventional classes. As with Montessori, this school aims to assist children in developing both initiative and responsibility in their learning and, indeed, in their lives.

Photo by Steven Senne

Graham and Parks School Steering Committee meeting

As the school staff describes their philosophy, "we try to balance freedom and responsibility for the students; we are truly concerned about the child and the curriculum, and we are concerned with educating the whole child -- the head, the heart, the body and how these interrelate. There is a strong emphasis on self and social awareness; we want our children not only to be capable, to have skills and knowledge, but to be lovable, to like themselves and others."

Secondly, as part of this general philosophy, Graham and Parks practices a system of shared governance: all major decisions are all made by the parents, teachers, and principal together. This approach to governance was built into the school at its inception because the school was started by a group of parents who believed in parental choice in schools. The shared governance arrangements at Graham and Parks are described in detail in Chapter VI.

All classes (except kindergarten) at Graham and Parks are vertically grouped (that is, they contain a mixture of children from at least two grade levels), just as they are at Bennett Park, and for precisely the same reasons. The classrooms at Graham and Parks are set up in a fashion similar to those in a Montessori school. For instance, in Judy Lazarus's first/second-grade classroom, the room is broken up into separate areas that resemble the spaces at Bennett Park -- a special carpeted area filled with books and other materials for quiet reading, a math area full of specialized math materials such as blocks and rods (except that here they are Dienes blocks and Cuisinaire rods), a science area that has an

aquarium with fish and a terrarium with a toad, another area for social studies, and one for art that is filled with easels and paints. These areas are somewhat overlapping and also contain tables and chairs.

The difference between these classrooms and those in a Montessori school is that the majority of the materials are developed and/or selected by the teachers or are brought into the classroom by the children themselves. Rather than using a prescribed set of materials in the prescribed fashion of a Montessori system, the children are encouraged to invent their own activities and learning experiences. This can happen individually or in small groups. Sometimes these activities are suggested and organized by the teachers; sometimes the activities and the materials are invented by the students themselves.

Children will often bring materials from home or the outside world. A live toad, for instance, will become the spontaneous source of a biology lesson for one curious student, a group of intrigued students, or even the whole class. Students are encouraged to bring in books and reading materials, and they are free to go to the reading corner to read or to add to the classroom's store of reading materials. Students are encouraged to write about their experiences and activities, and these productions, too, become a major part of the class's reading program. A truly developmental or integrated day classroom appears to be a somewhat disorderly hodgepodge of materials, with children moving busily about the room engaged in a variety of self-propelled activities.

Since the integrated day or developmental approach at Graham and Parks is a modified version, things are a bit more organized in Ms. Lazarus' classroom than they might be under other circumstances. For instance, in the quiet, carpeted reading area, there is an easel board with the class's schedule for the day. (My explanatory comments are in parentheses.)

Wednesday

8:30 Silent reading (Often parents help.)
9:00 Class meeting (Everyone gets together to talk about the day's activities.)
9:30 Handwriting
10:00 Music
Library (The class splits up for these two activities, which take place in other rooms.)
10:30 Recess
11:15 Math (The class is broken up into groups with most children working independently.)
12:00 Lunch
12:30 Story (Stories are read to and by children.)
1:00 Language Skills (The class is again broken up.)
1:30 Choice (Children select their own activities.)
2:30 Circle (Everybody gets together to discuss what happened during the day and to plan the next day's activities.)
2:45 Go home

Reduced to paper in this fashion, the schedule sounds deceptively rigid (and, indeed, in the purest forms of the integrated day, there probably would be no schedule). It is deceptive because it conveys no sense of the hum and busyness of the class or the amount of individual freedom and choice that goes on within those labels.

As I enter the classroom, the children are just getting back from recess for math period. The session begins with all of the children seated in a semicircle on the carpet. Ms. Lazarus and Chris Bentley, the class's student teacher from Tufts University, are standing in front of the semicircle.

"I'm going to show you how we're going to do the math today," says Ms. Lazarus. "We're going to work on lengths and distances. Some of you are going to get your rulers and a piece of paper and measure any of the things you want to in the classroom. For instance, if you wanted to measure this easel" -- now using the easel the schedule is on -- "how would you do it?" Several of the children show her how it would be done. "That's right," she says, "and always remember that length is always the long side and width is always the short side."

She and Chris divide the class up into three different groups. One group (apparently the most eagerly sought according to the number of waving and volunteering hands) will be working in a separate area doing geo-boards (small boards with nails placed at regular intervals on which children can make different geometric shapes using rubber bands). The largest group of children will take their rulers and begin measuring objects in the room, carefully writing the results ("Always in feet and inches, or else I might think it's three elephants you're talking about!") down on their pieces of paper. These two groups will be supervised by Chris.

Ms. Lazarus, meanwhile, will take a small group of six children into the math area to work on less advanced forms of measurement. She and the group sit down at a table. "First," she says to the group, "find a part of your body that might be one inch long and tell me what it is." The children pick out "toes," "nose," "knuckle." "So," says Ms. Lazarus, "if you don't have a ruler, you can remember what part of the body you used to tell what an inch is."

She then passes out a 12-inch ruler and a small block of one-inch-long wood to each child. She asks them to place the block on the ruler and to find the marks on the ruler that are exactly one inch long. They do it quite easily. "Now find the mark that tells you how long six inches is." They do that. "Now seven inches." They do that, too. She then gets out a box of pleistocene strips and gives each child a strip that seems to be about four inches long. She asks, "Now, how would two people share one of these pieces of pleistocene equally?" As several children suggest that you might break it in two, they all break their pieces in two.

While this activity is going on, Chris moves around the room watching and helping children who are either doing their board exercises or moving all over the room measuring trash baskets, the aquarium, bookshelves, tables, chairs, and each other, writing the results carefully on their pieces of paper and often busily conferring with each other and comparing results.

The room is a buzz of activity, so much so that at one point Chris says loudly, "Math people, freeze! You're making too much noise! For the next ten minutes, no talking!" For perhaps two minutes, the room is fairly quiet. After that, the hum rises again, but never back to its original noise level.

Judy Lazarus has taught at the old CAPS school and now at Graham and Parks for ten years. "I would say that it takes almost that amount of time," she says, "to learn how to be a really good teacher in a school like this. And to get the room developed so that it has enough of the right kind of materials to make it work. It takes me 50 to 60 hours a week to do all of the preparation and the actual teaching, even with Chris and a part-time aide to help."

"What we're trying to do here is to have children become involved in learning all sorts of different things and to learn them in all sorts of different ways because they are intrinsically motivated to do so, because they want to do it. It's a little like planting seeds. You put the seed in the ground and give it the proper attention and encouragement and watering, and all of sudden you looks around and -- my goodness! -- it's growing! You don't have to hit them with a hammer."

"What I am interested in doing here -- and I think the whole school feels this way -- is to create an environment where every child can succeed, even if to begin with she or he is only the best cricket catcher in the class. We have an enormous range of children among the 25 in this class, everything from children at a kindergarten level to children reading at a sixth-grade level. So you can't teach them all the same way or use the same materials."

"In fact, we create most of our own curriculum. We -- myself, Chris, and the children -- all decide together what our units will be. This year we've had units on Autumn Changes, the Hopi People, Winter Celebration, Peace, Lines and Sizes. We'll be doing at least one more, and we haven't decided yet what that will be."

According to Leonard Solo, the first and only principal of the school, "We do put a large emphasis on tying language arts and social studies together. But we try to keep things fairly flexible, to enable teachers and students to devise curriculum as they move through the year. We have, however, succumbed to testing. When we were at CAPS, we had an agreement that we would give standardized achievement tests only if parents requested it. Now we participate in citywide testing at grades three, five, and seven as well as state basic skills testing."

"Also," he continued, "we've done something here that most people think is a very strange thing -- at least for a school of this type. We've invested in a computer-assisted instruction program called Plato-Wicat. We have a room with 30 computer terminals all connected to one central mini-computer. That mini-computer has all sorts of basic skills programs in it. Although this is our first full year at it, we feel that this is going to play a significant role in teaching the basics. And it does work; kids do learn. This takes a great load off teachers. We hope it will allow the teachers to get back to doing more imaginative and interesting things in their classrooms and not spend all of their time teaching basic skills."

CITY MAGNET SCHOOL
LOWELL, MA, PUBLIC SCHOOLS

The building is old and dilapidated. Built in 1935 by the Works Progress Administration (WPA) as a trade high school in downtown Lowell, today the City Magnet School is surrounded by mill buildings that have been restored as part of the nation's first urban national historical park. Over the battered front door, a bright blue sign reads "The Lowell City Magnet School." After passing through the door, visitors are greeted by two more signs. One reads "Welcome to the City Magnet School, the Nation's Only Micro-Society School." The other, a large banner donated to the school by the graduating class of 1985, reads "We've Done So Much With So Little For So Long, We Can Now Do Anything With Nothing," a saying that is fast becoming the school's unofficial -- and perhaps eventually official -- motto.

Micro-society court in session at City Magnet School

Inside the building itself, even though the paint is peeling from the walls and part of the school is shut off so that rehabilitation can get under way, the school is humming along. In the principal's cluttered office, a volunteer parent is at the secretary's desk while Tom Malone, the school's full-time program facilitator, simultaneously talks on the phone, answers questions from students and teachers, and welcomes me.

Between phone calls and interruptions, Malone fills me in about some of the background on the school. Created approximately seven years ago as a major part of Lowell's systemwide plan to reduce minority isolation, the City Magnet was started from scratch as a citywide magnet for grades kindergarten through eight. The more than 200 students (and there's a lengthy waiting list of students who wish to get in) come from all over the city. Students are admitted on a first-come, first-served basis, with 40 percent of the seats reserved for minority students.

"Our teachers are all volunteers, too," says Malone. "And so am I. So, in that sense, everyone in this school -- students, parents, teachers, and principal -- has chosen to be here and wants to be here. What that means is that everyone here is in agreement that the school is and should be a micro-society school. There is probably not total agreement on exactly what that means since we are still in the process of developing the school. We are growing and changing things every day, so there is a great deal of arguing back and forth, and that's healthy and as it should be. But it does make an enormous difference that we all have a basic agreement about what kind of school we should be. It makes us able to get on with the job, with everyone participating instead of arguing about whether we should or should not have a school like this."

So what precisely is a micro-society school? It is a school whose main job is the teaching of all the necessary basic skills. But this school attempts to achieve this goal and others in a very different way. A micro-society school is based on ideas developed and pioneered by George Richmond, a scholar and teacher in the New York City public schools who wrote The Micro-Society School: A Real World In Miniature (Harper and Row, 1973). Richmond's idea is that students -- with the help and guidance of their teachers -- design and run their own democratic, free-market society in school.

So the City Magnet School's students have set up their own government with legislative, executive, and judicial branches. They have written (and are continually revising, amending, and updating) their own school constitution and laws; they have set up courts and a system of justice, a system of taxation through their own internal revenue service, a City School lottery, and even a police force called the City School Crime Stoppers.

They have also created their own school economy and currency called Mogans, named after Patrick J. Mogan who was superintendent of the Lowell Public Schools when the school was created. The students run two banks -- every student in the school has his or her own bank account -- and a slew of businesses, including law firms, corporations that manufacture and sell decorations and toys, and retail enterprises that sell such things as stationery, pencils, and erasers. In the thriving publishing side of the curriculum, which essentially constitutes the school's language arts program, students write, edit, and publish their own newspapers and magazines.

All these activities are real jobs, and everyone gets paid for doing their tasks. In the micro-society, everyone has to have a job and to earn his or her own keep, just as people do in real life. Another of the school's mottos is "In this school, there's no free lunch." To learn all the things a student needs to learn in order to earn a living and participate in this school society, students have to go to school. Each student has to take classes and pass what the school calls placement or competency exams before he or she can get and hold a school job. To get a job in a bank or start a business, a student must pass the banking and accounting exam. To get a job on a newspaper or a magazine, a student must pass the publishing exam. To become a lawyer or a judge in the judicial system, a student must pass the bar exam. Before any student graduates from this school, he or she has to make a hard, honest attempt to pass all the competency exams, thereby demonstrating that the student has acquired all basic skills -- and, the school hopes, a great deal more.

And since students must go to school to learn all the things they need to learn, the school operates a school within a school, called the City School Academy. The regular classes are held during most of the morning hours and are required of all students until they pass the competency exams. But these classes aren't free. All students pay tuition out of the money they earn by holding jobs in the rest of the micro-society.

In Norm Charette's City School Academy intermediate cluster "economy" class,

which is mainly made up of fourth graders, there is on one of the walls an elaborate, multicolored, student-made bar graph labeled "Intermediate Cluster Money Supply." Week by week the growth or decline of the cluster's total income of Mogans -- earned income, savings, and the like -- is calculated and put on the chart. A separate bar next to each income bar calculates the cluster's outgo -- taxes, tuition, purchases, and so on. The difference between the two bars is the cluster's net reserves.

When I slip unobtrusively into the room, Charette and the class are using the bar graph to work on a common business problem, which also happens to involve multiplication and long division. "What if," says Charette, "we wanted to buy 86 spice ropes (a mysterious product manufactured by one of the cluster's businesses)? What do we first need to know?" A student pops up with "How much a spice rope costs!" "Right," says Charette. "How much does one cost?" Another student supplies the answer. "Okay," says Charette, "what do we need to do to find out what our 86 spice ropes are going to cost us?" "Multiply," comes the answer. "Right again," says Charette, "so let's do it."

All hands -- or most hands -- settle down with pencils and paper to work the problem out. After a few minutes, one student sings out, "6,450!" "That sounds right to me," says Charette. "Does everyone agree?" Most of them do. "Now, how many Mogans do we have altogether as a cluster?" A student goes to the bar graph and calls out, "15,000!"

"Okay," says Charette, "if we spent 6,450 Mogans on spice ropes, how much would we have left over?" More pencils scratching on paper. "8,550," says one student. "Okay, if we wanted to put all of that money into spice ropes, how much would each of us have to pay?" Charette counts the number of students in the class. "There are 28 of us, so how much would each of us have to pay?"

At this point, realizing we have a problem in long division, I get my own pencil and paper going. My answer, speedily arrived at by dividing 28 into 8,550, is 351. After considerable effort, several members of the class are ready with their answers. "305," says one student. Poor guy, I think. "That's right," says Charette. I check my figures, only to find that I could hardly have been more wrong.

The City School Legislature is called to order at 2 p.m. on a Monday by Maria Dixon, an eighth grader who is the school's elected president and the legislature's presiding officer. The school's governing body, all twenty-eight members elected by their respective classes, has been wrestling for several weeks with a major financial crisis. The government had run out of money, and the government employees, from Maria on down, have not been paid for five weeks. This created an enormous governmental deficit since the employees were not able to pay their taxes unless they also happened to have another job.

Micro-society bank is open for business at City Magnet School

One reason the budget got out of control was a decision the legislature made several weeks ago aimed at solving the "welfare" problem -- a decision to fund a student loan program. This was deemed necessary because a handful of the school's students -- about fifteen to eighteen in each of the school's three strands of publishing, economy, and government -- have been unable (or possibly unwilling) to pass their competency exams. Since they have been unable to get paying jobs, they have been unable to pay their own way or their share of the taxes. What to do?

One solution was a welfare program. The government would pay all the living expenses of these students until they passed their exams. These expenses would include not only normal taxes and tuition but also the cost of special tutoring by other students (tutoring by students who have passed their competency exams being one of the services provided by the government). The legislative members rejected this solution on the grounds that "the students would lose their motivation to pass the exam if they were paid by the government." A second possibility presented was a "workfare," a public works approach under which the students would work at various clean-up jobs around the school to earn at least a minimum salary while studying for their exams. The legislature rejected this idea because the members felt such make-work would not allow the students enough study time.

The third possibility -- and the one finally accepted -- was a student loan program. The government would lend the students the money to pay their living and tutoring expenses until the next testing period in February. The students would then have to pay back their loans out of the income earned when they passed the exams and were able to get jobs. The faster they acquired the skills necessary to pass the exams, the faster they could get jobs and the less money they would have to pay back. The legislature thought such a system would provide just the right amount of carrot/stick motivation.

The passage of this student loan program had one consequence that then had to be faced. It required money to fund it, money that was not in the government's original budget. At this point, the legislature was already in a fiscal crisis. The government workers were picketing the legislature and threatening to strike. The representatives were thus faced with a sizable dilemma. They could raise taxes (which many had pledged to lower when they ran for election). Or they could cut government programs and salaries and not institute the loan program. After painful deliberation, the legislature passed a budget that lowered government

salaries and limited the loan program to only four weeks while keeping the current tax rate.

But that still left the short-term problem of producing enough immediate money to pay the government workers (including back pay) and the long term problem of funding a larger budget. The legislative agenda of this afternoon's session has concentrated on two topics. The first is a motion authorizing the government to borrow 4,500 Mogans to pay the government workers so that they could pay their taxes. The second is the possibility of a corporation tax on the micro-society businesses to help fund the new budget. After much wrangling over which bank to go to for the loan (and choosing the bank offering the lowest interest rate), the group passes the bank loan motion. Time, however, runs out on the corporation tax proposal, which is put off until next session.

To this observer who had just that morning been reading the news of the latest congressional budgetary wrangling emerging from the nation's capital, the events taking place on the first floor of the old trade school building in Lowell exude a pleasing aura of authenticity.

Indeed, in the minds of the school's creators, this legislative experience is an example of the motivation in a micro-society curriculum. Other schools may work hard on the development of critical thinking skills, but City School students acquire thinking skills through solving real problems.

The heart and soul of this school is the micro-society activities since it is through these activities that the children acquire and continually practice all of their basic skills of reading, writing, mathematics, social studies, and science. Students see their traditional classes at the City School Academy as a means to the end of passing the competency exams and qualifying for a more active and rewarding participation in the school's life.

"I think," says Malone, "that there are two main reasons why we consider this to be a successful school. One is the micro-society itself, the fact that we offer an unusual curriculum that actually works. We have done surveys of our parents, and a lot of them do mention the micro-society curriculum as an attraction. I think they do see it as a school that really does prepare kids for life. Many of our parents are working class people who are very concerned with their kids making it and being successful in the world of work."

"And I firmly believe," Malone continues, "that the micro-society makes a real contribution to their learning all the basic skills; they simply can't survive in this society unless they buckle down and learn and pass their exams. Otherwise, you go on our equivalent of welfare, and kids here hate doing that. Our test scores show that kids here do learn their basic skills -- and I think they learn them better than they would in a regular school. Although we are a little behind the national averages in reading (we are addressing this problem as we continue to meet in our curriculum workshops), our kids are a year ahead of the national norms in math and well above the citywide Lowell averages in both reading and math."

"The second reason for the school's success," says Malone, "is the process of participation and the sense of ownership that it engenders. The kids feel ownership and excitement because they are responsible for running their own lives and their own society. But the teachers and the parents also have it. In fact, what we have here amounts to what should be called shared governance."

Since this visit to the City Magnet School took place, the 1935 building that houses the school has been completely renovated and redesigned specifically to house the micro-society educational program. Although conventionally designed classrooms exist for the City School Academy, there are also rooms specifically designed to house the legislature and the court system, offices for the governmental functions, areas specifically designed and equipped for the publishing enterprises, and a large area for the marketplace where students conduct their businesses.

Practitioners exploring Montessori, developmental, or micro-society schools might want to consider the checklist on the following page:

PRACTITIONER'S CHECKLIST

MONTESSORI, DEVELOPMENTAL, MICRO-SOCIETY SCHOOLS

	Yes	Somewhat	No
1. EDUCATIONAL PHILOSOPHY			
a. Stresses learning basic skills and the development of every child's intellectual, social, and moral powers.			
b. Believes students are responsible for their own learning.			
c. Expects students to play an active role in making decisions about what will be studied and how such learning will take place.			
d. Believes that children learn best through their own activity, their own curiosity and initiative.			
2. CURRICULUM			
Teachers and students have the flexibility and time to investigate topics and subject matter that arise spontaneously from day to day and week to week.			
3. SCHOOL ORGANIZATION			
a. Allows for a flexible schedule so that children and teachers organize their own learning activities.			
b. Divides classrooms into different areas devoted to different kinds of activities.			
c. Provides for classrooms equipped with a wide range of learning materials that children can use on their own, including books, objects to be manipulated, animals, science materials and kits, and art materials.			
d. Provides opportunities for all students to explore their interests and develop all of their talents.			

4. HOW STUDENTS SHOULD BE GRADED

	Yes	Somewhat	No
a. Reports regularly to parents, most likely through written comments describing each child's progress not only in basic skills but also in all other aspects of a child's development.			
b. Arranges regular parent/teacher conferences.			

CHAPTER VI

NONTRADITIONAL SCHOOLS WITH CURRICULAR SPECIALTIES

Often the staff of a school of choice will decide to offer a curriculum that provides for the teaching of the basic skills and all (or almost all) the traditional curriculum subjects while offering an intensive and extended learning experience in one particular curricular area, such as science and technology, the fine and performing arts, foreign languages (including two-way bilingual schools such as the Rafael Hernandez), or computer science.

These specialized elementary and middle/junior high schools are not vocational schools. Their main purpose is not to train students to become professional artists, musicians, scientists, mathematicians, or linguists. Rather, they propose to provide some of the diversity of educational programs that choice systems feature so as to fit the diversity of needs, interests, and abilities of the students. Such specialized schools can provide students who have particular interests or talents with a school experience that is a great deal more satisfying to them than the traditional school curriculum.

It is important, however, that practitioners who are thinking about creating any such school, whatever the curricular specialty, first decide on the structure and organization of the school. The practitioners will need to decide whether the school is going to be a traditional or a nontraditional school. Thus the Isaac Newton School for Science and Math, described in Book III, is organized and operated as a traditional school, whereas Lowell's Arts Magnet is a combination of a traditional and a nontraditional structure.

Practitioners planning a specialty school must also decide whether they are going to be selective in their admissions (as at Isaac Newton) or open to all students who apply (as at the Arts Magnet). In many specialized secondary schools, such as the famous Bronx High School of Science and the High School of Performing Arts (the "Fame" television school) in New York City, students must be achieving at or above grade level (or pass an academic examination) and demonstrate a talent in the field in which the school specializes. They are then selected on the basis of the tests and/or their demonstrated abilities.

Where educational diversity and parent/professional choice are a means of providing desegregation and educational equity, any selective admissions policies can cause major problems. This is true even for specialty schools in the arts or sciences if the special criteria are combined with a selective academic admissions requirement. Such practices can often cause minority/majority imbalances in either direction, depending on the makeup of the district's student population. School staff will need to be aware of that possibility and decide on how to overcome it.

Once these decisions about the structure and organization are made, practitioners can begin to make the next set of decisions: how the school's curricular specialty will fit into the school's overall philosophy and organization and how the curricular specialization will be carried out. There appear to be at least two ways to go about this. The first way is the Isaac Newton approach, in which the practitioners decide to give less time to some part or parts of the curriculum. In order to specialize in science and math, for instance, Isaac Newton does not offer music or art. The second way is the infusion approach favored by the Arts Magnet, in which teachers incorporate the specialized curricular material into all the subjects taught in the school.

WHY PRACTITIONERS (AND/OR PARENTS) MIGHT CHOOSE THIS KIND OF SCHOOL

Practitioners will most likely wish to teach in these specialized schools because they themselves have a strong interest or special talent in the curricular area in which the school specializes. Parents and students, on the other hand, will be attracted to this kind of specialized schooling for several reasons. Most often, a child has a strong interest, perhaps even an unusual talent, in the field in which the school specializes. Parents may also select such a school because of its general atmosphere, its reputation for being an effective school, or because they feel it is important for children to be well-grounded in the school's specialization.

Consider the following example of a specialized nontraditional school, the Arts Magnet School.

ARTS MAGNET SCHOOL LOWELL, MA PUBLIC SCHOOLS

"It doesn't have a name yet, but it's about Xavier, this rich guy who has three different personalities. He lives in Switzerland, but his parents were killed in an automobile accident. Up to the age of thirteen, he's Xavier. Then he becomes Richard. And after that, he invents Adolph."

"It" is a novel that is being written by the entire class in Jim Neary's eighth-grade English class at the Arts Magnet School in Lowell. The description of the plot is being given by the three members of the team charged with writing the novel's last chapter. The entire class has been divided into three member teams, with each team assigned to write one of the book's chapters. The whole class has worked out the general outline of the plot, which is scheduled to end with Xavier's death at the age of forty-three. Each team is given six years of Xavier's life to write about while faithfully keeping to the plot outline. The team members do most of their writing at home at night; they then bring the results in the next day and compare what they have written -- as well as make sure that one of the other teams has not written something that will "mess up what we were planning to do."

Today, the final-chapter team is wrestling with the problem of how to kill off Xavier and tie up all the loose ends of the plot. Since none of the other characters in the book are supposed to know that Xavier is also Richard and Adolph, there is a slight problem of how all three get killed off while still keeping the mysterious secret of Xavier's three personalities. The team has come up with an ingenious, highly creative solution. Three people -- Xavier, Richard, and Adolph -- will be seen at different times by the other characters entering a closed-off room. Three shots will ring out. When the other characters burst into the room, they will find only one body, Xavier's. One of

the other loose ends is how to dispose of Imogene Shepherd, the novel's heroine, since it has been decreed that everybody in the book gets killed. One possible solution is that Imogene is buried alive in the cellar. This is reminiscent, I tell them, of "The Cask of Amontillado," a story by Edgar Allan Poe. Is that where they got the idea? No way, it turns out. They are borrowing the notion from an episode of the television show "Riptide."

When completed, says Neary, the novel will be typed into the school's computer, printed out and photocopied for "publication." "Actually," says Neary with a laugh, "I'm not sure I want to have anything to do with this production. There must be at least one murder or killing on every page. But then everyone dies at the end of *Hamlet*, too, so maybe I shouldn't worry too much. But I am attempting to prevail upon them to limit some of the violence, such as allowing Imogene to survive. I hope that by writing a novel, they will begin to get some real notions about how to solve problems and make decisions, how to cooperate in a group, and what their place is or could be in the writing process."

In the combined kindergarten/first grade class area, Deborah Tucke Dupuis, the class's teacher, is holding up a large piece of white poster paper with the outline of a heart drawn in red Magic Marker. In the middle of the heart is the letter *t*.

Students working with clay at Arts Magnet School

"Today," says Ms. Dupuis to the assembled mass of eager faces, "we're going to make our own valentines. Each one of you is going to get one of these posters with your very own letter in the middle. When you get your valentine, I want you to decorate it with four pictures of things that begin with your letter, two on this side of the valentine and two on this side, but all inside the big heart. Now I'm only going to say this once -- Quiet people and good listeners are going to get their hearts first."

Ms. Dupuis moves around the room passing out a poster to each child. Johanna, a first grader dressed in a red shirt and Oshkosh coveralls, has the letter *L* in the middle of her heart and sets to work immediately with her box of crayons.

At first, it is difficult to figure out exactly what she is drawing, but soon her picture turns out to be a very expressive lion. This is quickly followed by a bright yellow lemon, a brown lamp, and a small yellow lamb. Ms. Dupuis, who has been moving about the room offering help and encouragement, comes by and says "Very good, Johanna." Johanna smiles triumphantly.

As Peter Downing, the principal of the Arts Magnet, puts it, "The two activities you saw, the novel being written in Jim Neary's class and the valentines in Debbie Dupuis class, are just two examples of how this school integrates the teaching of the arts, basic skills, and other subject matter."

"I don't know," he adds with a smile, "whether it should be called teaching the basics through the arts or teaching the arts through the basics or just teaching them both together, but that's the way we try to do it. We think both things are important. Because you just can't do a lot of the arts if you don't have the basics -- you can't write a play or act in it if you can't read, you can't build a set if you can't measure and do math -- we really stress the basics in the first three grades."

"As the children go up in the grades, they do more arts and the integration of the arts and basic skills becomes much easier. We do a lot of production work here. Sixth, seventh, and eighth graders -- with considerable help from the teachers and a lot of other volunteer adults -- write and produce their own plays and musicals. For the last two years we had a major original musical production in the spring. It's the focus of the whole year's work. The students help write the book, design the sets and costumes, and build the sets. They are the actors and the stage managers."

Take another example from the same school. The "art room" in which Dan Gaudette's art classes are held is actually only a small part of the cafeteria space, a section cordoned off from the rest of the school by tall metal cabinets. The sides of these cabinets and the two full-length walls are covered with student artwork.

About twenty intermediate students, mostly sixth graders, are each planning a line-and-shape design that they will later enlarge into a painting. "What we are working on here," says Gaudette, wiping his hands on his plastic apron, "is proportion. They are first working out on these small pieces of paper the design they will use when they do their painting. But when they start that process of translating this small design into a large painting, they have to wrestle with how to take something small and make it proportionately larger. Not only is this an art problem, it's also a mathematical problem. So they have to work on that, too."

He walks over to a model of the inside of a medieval castle sitting on a table beside his desk. "This is a similar problem. This is a model of the set for *King Didrick's Will*, the spring production. The students -- with some help from me -- made this model as an exact replica of the stage at Mahoney Hall. They had to take all of the measurements of that stage and reduce them, precisely, to the dimensions of this model. They also had to work out and show how the scenery

will change for all of the different scenes. Pretty soon now we'll start building and painting the actual scenery."

He keeps a watchful eye on his busy charges, frequently answering pleas for help. "What I think we're trying to do here in the visual arts program is to teach the basic skills of perception. We want to strengthen their senses, build up their visual perception muscles, so to speak. We want them actually to see things in the environment they may have never really seen before. We want them to see and construct the visual world in new and wonderful ways."

Student production of "King Didrick's Will" at Arts Magnet School

"We also want them to develop self-confidence in their own ability to create. When they come here, they tend to think that everything has to be perfect and perfectly representational, an exact 'right' copy of what's out there. We try to wean them away from that, to give them the confidence to make their own interpretations, to express their own vision."

"When the students arrive, many of them don't know that they have ability and talent in the arts. Some of them discover these abilities slowly, but some of them -- and many of the best of these are not good at conventional academic subjects -- seem to grasp what it's all about instantly, as if they came with a blueprint already in their heads, some kind of strange intelligence that enables them to understand and create almost without thinking about it. But in general, the school provides so many opportunities for creativity that almost every student finds something he or she is good at. The real problem is channeling all of their energy into the creation of things they find satisfying and beautiful."

CHAPTER VII

NON TRADITIONAL SCHOOLS AND SHARED GOVERNANCE

The key points that practitioners might wish to keep in mind about these nontraditional schools are the following:

- They are *activity based*. They depend on children becoming active partners in the process of their own learning and development.
- They can exist only in school systems that permit a considerable degree of both parent and professional choice. It is virtually impossible to establish such nontraditional schools in systems that maintain only neighborhood schools because it would mean that such unusual schooling would have to be imposed on parents and students.

In addition to the basic differences in educational philosophy and school organization that distinguish the various options described in *Planning for Schools of Choice*, there is another realm in which individual schools of choice can and do differ: the degree to which the professional staff and parents are involved in the day-to-day operations of the school and in making the important decisions about how the school will be run. Though all schools of choice are strong on involving both professionals and parents, nontraditional schools are more likely to advocate and practice a greater degree of professional and parent involvement, including shared governance.

In many -- and probably most -- schools of choice, the role of the professional staff in the decision-making process is somewhat broader than in other schools. This arises from simple necessity: the need to develop a school's unique educational program. Since the unique educational programs of such schools do not usually spring full-blown from the forehead of the superintendent of schools, the staff engages in an often lengthy period of design and development. Therefore, the professional staff of the school is deeply involved in making many of the important decisions concerning the operations of the school and the development of that unique curriculum.

In Lowell, Massachusetts, for instance, each of the first seven schools of choice held weekly staff and curriculum development workshops throughout the school year, always involving the principal, teachers, and parents. At the two citywide schools of choice, the Arts and City Magnets, summer workshops also occurred.

A few schools of choice, for the most part nontraditional schools, have moved beyond these forms of professional and parental involvement to develop a system of shared governance. Here both the school's professional staff and its parents have a controlling voice in all the major decisions affecting the school's life. At the Graham and Parks Alternative Public School in Cambridge, Massachusetts, for instance, the school staff believes in and practices a system of shared

governance or shared decision-making in which all major decisions are made together by parents, teachers, and the principal. This approach was built into the school from the start. Graham and Parks is governed by a steering committee made up of five parents elected by the parents, five teachers chosen by the teachers, the principal, and the parent coordinator.

As Principal Leonard Solo describes the process, "the twelve of us make the decisions about every aspect of the school. Nothing happens of policy importance unless it has been decided by the committee. Each of us has one vote, and nobody overrides anybody on that. The decisions of the committee are binding on everyone, including me."

WHY PRACTITIONERS AND PARENTS MIGHT CHOOSE THIS KIND OF SCHOOL

"The committee has proliferated several subcommittees for special purposes -- buildings and grounds, fund raising, curriculum and, most importantly, the hiring of staff. When a position opens up, the hiring committee interviews the applicants. The committee is made up of half parents and half staff members, all carefully mixed by race, sex, and socio-economic background. I'm on the committee, too. This committee decides on the finalists for the job."

Principal Robert Weintraub describes the governance system of the City Magnet School in Lowell -- "There is another thing about this school that I think is just as important as the micro-society, and sometimes I think it is more important. And that is the process of participation and the sense of ownership that it engenders. The kids feel ownership and excitement because they are responsible for running their own lives and their own society. But so do the teachers and parents."

ARTS MAGNET SCHOOL
LOWELL, MA PUBLIC SCHOOLS

"In fact, what we have here amounts to what should be called shared governance. For instance, many of the major decisions about what's going to happen here are made not by me alone but by the various participatory structures we've developed, by the teachers in their weekly workshops, the parents at PTO officer meetings, the children in their legislature, and all of these participants together in what we call our executive council. I chair the council, but that's all. It's not only lonely but stupid for a principal to try to make all the decisions. The best decisions are made with the people who are affected by those decisions."

"And we really do try very hard to get all of our parents involved. Not long ago, one of our three Hispanic executive council members, Anna Baez, said at a parents' organization meeting that our Hispanic parents were not participating as much as we hoped they would (after all, they are 30 percent of our population) and that this was happening for a variety of reasons, including the fact that they felt inadequate because of their lack of English language skills."

"So we decided to set up a separate Hispanic parents' group where Spanish is the only language used (and I made a commitment to learn Spanish). We sent a questionnaire to all our Hispanic parents, asking them if they wanted such a group. They did, so now we have one. I'm just citing this as an example of the process that we've always tried to have here, where everybody sits down and talks and hopefully is respected for their opinions and listened to by everybody else."

"And this kind of participation, including the executive council, is built right into the school's constitution. This school is designed to be a democratic, participatory institution. We could have designed a typical autocratic school. Adults can impose their will on kids very easily, schools can impose their will on parents very easily, and most of them do both. Here we could have created a kind of fake democracy. We could have created a constitution that gave kids and the parents very little real power or responsibility. We didn't do that. And we've gotten more democratic over the years. For instance, in the first version of the constitution, the executive council's role was described as 'advisory' to the principal. An amendment was passed last year saying that from now on the council 'shares' the principal's power. The council's decisions are now binding on everyone, including me."

CHAPTER VIII

NEW DIRECTIONS

The introduction of educational diversity in public schools produces a series of radical changes in our traditional way of thinking about and operating a system of public education. Indeed, it could be said that it raises the possibility of a new kind of public educational system that operates quite differently from the status quo.

Whether such a system will gradually emerge from the grass roots of the school systems that are desegregating through diversity and choice and whether that system will gradually replace the existing systems is anybody's guess. To some extent -- perhaps to a very large extent -- the future establishment of any new system will depend on how much the individual schools of choice succeed in satisfying the professional aspirations of professional educators and the expectations of parents and students. And any such success of individual schools may well depend on how much professional practitioners are first encouraged and then supported in the development of the different types of schooling that parents want and students need.

So the future success of any new system of public schooling based on diversity and choice may well depend on the answers to the following questions:

- Do the parents have the ability to choose the kind of schooling they wish for their children?
- Are teachers and principals able to choose the kind of schooling they will practice?
- Do the local school board and central office administrators want to provide genuine educational diversity and choice for both parents and the system's practitioners?
- And finally, are the teachers and principals interested in taking on the difficult, but professionally more rewarding responsibilities, involved in the creation and operation of such a new system?

If these questions are all answered yes, a school system is moving toward a truly diverse restructuring with site-based management and shared governance. Such a system's administrators believe in and practice real integration of heterogenous students in the best way possible. They enlist the support of parents in restructuring the school and empower professional staff through real decision-making and real choices.

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